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Some results of studying of daily variations of dynamic parameters on oilfields by means of vibroseismic monitoring

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Abstract

This article is devoted to a new actual direction in geophysics - an active seismic monitoring on an oilfield. Research have been executed by means of vibroseismic survey 3D on the oilfield on four circular patterns during a period of maximal lunar-solar tide. As a result of researches daily variations dynamic parameters which are correlated on some sites of an oilfield with the rated chart of tidal gravitational forces are registered. The degree of this correlation depends on tensor sensibility of geological environment. Temporary heterogeneity was revealed on the territory of the oilfield. The received results can be used in oilfield prospecting and their division into districts.

Keywords

Dynamic analysis, Lunar-solar tide, Oilfield, Temporal heterogeneity, Vibroseismic monitoring